

60158-107

REMARKS

Claims 21-28 and 31-36 stand rejected under 35 U.S.C. §103(a) as being obvious over Hsich (U.S. Patent No. 5,972,450) in view of JP 06329958A (the Japanese reference) and the Crea Nova publication. The Examiner contends on page 4 of the Office Action that it would be obvious to employ the polyamide particles of Crea Nova in the film of the Japanese reference on the metal tube 10 of Hsich, and therefore Applicant's claims are obvious. Applicant respectfully disagrees.

There is no suggestion or motivation to provide the polyamide particles taught in Crea Nova in the epoxy film taught by the Japanese reference to form a layer in Hsich. Hsich discloses a metal tube 10 having an inner layer 12 of a first polymeric material (such as epoxy) that provides chemical resistance and prevents corrosion. An outer layer 14 of a second polymeric material extruded over and weakly bonded to the inner layer 12 absorbs impact energy and provide abrasion resistance (column 2 lines 38-55 and column 3 lines 54 to 59). The Japanese reference teaches an epoxy resin film including polyamide resin powder that provides an oxygen barrier against corrosion resistance. Crea Nova teaches a lacquer including a polyamide 12 powder that prevents abrasion. If polyamide particles were added to the epoxy inner layer 12 of Hsich, the polyamide particles would provide no benefit because the epoxy inner layer 12 is covered by the outer layer 14, canceling out the abrasion prevention function of the polyamide particles. There is no suggestion to employ the polyamide particles of Crea Nova with the film of the Japanese reference as a layer on the tube 10 of Hsich, and Applicant's claims are not obvious.

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There is no motivation to utilize plastic particles in a lacquer as taught by Crea Nova in an epoxy resin film taught by the Japanese publication as layer in Hsich. Epoxy resins are very different from lacquers and cannot be substituted for each other. The epoxy resin film of the Japanese reference provides corrosion resistance. The plastic particles of Crea Nova are used in a lacquer to "give structure and improve abrasion resistance" (page 4). The abrasion resistance plastic particles of Crea Nova would provide no benefit in the corrosion resistant epoxy coating of the Japanese reference. Therefore, there is no motivation to combine these references and use this film as a layer in the tube 10 of Hsich. This combination would provide no benefit to Hsich. There is no suggestion to combine Hsich, the Japanese reference and Crea Nova, and the Examiner's rejection is improper.

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The Examiner also states on page 4 of the Office Action that it is desirable to coat a metal tubing with zinc to provide more corrosion resistance. However, the Examiner supplies no evidence of this assertion. Applicant cannot respond without this evidence, and therefore asks that the holding be dropped or the evidence be supplied (MPEP 2144.03). The use of electroplated zinc is not a matter of engineering choice. Applicant's claims are not obvious.

Thus, claims 21-38 are in condition for allowance. No additional fees are seen to be required. If any additional fees are due, however, the Commissioner is authorized to charge Deposit Account No. 50-1482, in the name of Carlson, Gaskey & Olds, P.C., for any additional fees or credit the account for any overpayment. Therefore, favorable reconsideration and allowance of this application is respectfully requested.

Respectfully submitted,

CARLSON, GASKEY & OLDS, P.C.



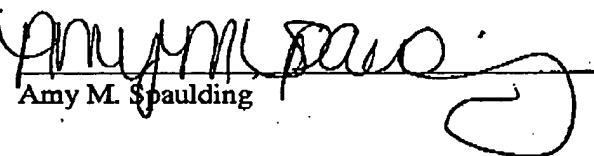
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CERTIFICATE OF FACSIMILE

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, TC1700, Before Final, 703-872-9310 on September 4, 2003.



Amy M. Spaulding

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